UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,925	01/23/2002	William R. McDonnell	8238	2819

1688 7590 09/09/2003

POLSTER, LIEDER, WOODRUFF & LUCCHESI
763 SOUTH NEW BALLAS ROAD
ST. LOUIS, MO 63141-8750

EXAMINER	
SWIATEK, ROBERT P	

ART UNIT	PAPER NUMBER
3643	

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/031,925	MCDONNELL, WILLIAM R.	
	Examiner	Art Unit	
	Robert P. Swiatek	3643	

-- Th MAILING DATE of this communication appears on the cov r she t with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *128,130,133,141,168,184,185,187,198,251,254-256,284 and 289* is/are allowed.

6)☒ Claim(s) *See Continuation Sheet* is/are rejected.

7)☒ Claim(s) *147, 159, 221, 223, 226, 229, 248, 262,* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Continuation of Disposition of Claims: Claims pending in the application are 128-130,132,133,141,147,150-153,157,159,168,177,184,185,187,198,209-214,216,217,220,221 and 223-291.

Continuation of Disposition of Claims: Claims rejected are 129,132,150-153,157,177,209-214,216,217,220,224,225,227,228,230-247,249,250,252,253,257-261,263-283,285-288,290 and 291.

DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 129 is rejected under 35 U.S.C. 102(b) as being anticipated by King (US 3,684,219). The patent to King discloses an aircraft launcher including lifting apparatus 10 for carrying an aircraft 88 to an elevated altitude, tow line 28 connecting the lifting apparatus 10 to a base structure (considered to constitute the operator holding the tow line 28), and launching means 42, 44, 50, 64, which is deemed equivalent to applicant's actuator 14, thrust link 15, and pin 16. The aircraft 88 of King is considered capable of controlled flight in that it does not normally enter into a spin or uncontrolled dive upon being launched but glides in a controlled manner to the ground.

Claim 129 is rejected under 35 U.S.C. 102(b) as being anticipated by Baird (US 4,842,222). The Baird patent depicts an aerial launch device for an aircraft 14, the device including a lifting apparatus in the form of a kite 18, a tow line 12 connected to a base structure (a person on the ground holding the line 12), and a launching means 20-23, 30, 34, 36, 42, 44, which is deemed equivalent to applicant's actuator 14, thrust link 15, and pin 16. Aircraft 14 of Baird is considered capable of controlled flight once launched.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 132 is rejected under 35 U.S.C. 103(a) as being unpatentable over King. Use of a winch, rather than a person, to draw the lifting apparatus—kite—of King back to earth would have been obvious to one skilled in the art wishing to ease the task of recovering the kite.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 150-153, 157, 177, 216, 217, 220, 224, 228, 230, 253, 257, 263-269, 290, 291 are rejected under 35 U.S.C. 102(e) as being anticipated by McGeer et al. (US 6,264,140 B1). The McGeer et al. patent discloses a system for retrieving a fixed wing aircraft, the system including a lifting apparatus 1 in the form of a kite, a mast, a balloon or a kite/balloon hybrid (the latter considered a balloon in combination with a lifting device); one or more arrestment lines or tethers 2 (see column, lines 36-40, of McGeer et al.) held up at one end by the lifting apparatus 3; and an aircraft 14 with one or more capture hooks 19 along a wing leading edge. Since the wing can include more than one leading edge hook, at least one hook thus is considered to be located on a forward, inboard edge of the wing. The aircraft wing 16 of McGeer et al. is considered to

be "suitable for deflecting" the arrestment line into the capture hook. As to claim 217, since "any number of capture hooks" can be placed along the wing of the McGeer aircraft (see column 3, lines 54, 55), it is considered inherent that with many hooks, at least one would be located "inboard more than 5% of the wing semi-span." As to claim 291, the crane or mast that can support the arrestment line of McGeer is deemed to constitute a beam. With regard to the declaration under 37 CFR 1.131, it is noted that such is not appropriate where the reference U.S. patent—in this case, the McGeer et al. patent—claims the same patentable invention.

Claims 209-214, 225, 227, 258-261, 283, 285 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGeer et al. While the McGeer et al. reference depicts a non-swept wing aircraft, use of a swept wing aircraft with the McGeer et al. capturing system would have been obvious to one skilled in the art wishing to retrieve a variety of aircraft rather than be relegated one particular type or model. As to claim 225, use of fabric in the kite lifting apparatus of McGeer et al. also would have been obvious to one skilled in the art wishing to increase the durability of the kite.

Claims 231, 270-278 are rejected under 35 U.S.C. 102(e) as being anticipated by McGeer et al. As described above, the patent to McGeer discloses a method and system for retrieving a fixed wing aircraft. It is noted again that a declaration under 37 CFR 1.131 cannot be used to swear behind a reference that claims the same patentable invention.

Claims 232-247, 249 are rejected under 35 U.S.C. 102(b) as being anticipated by Tucker (US 1,748,663). Hook 50 of Tucker is attached to aircraft A and engages the cable loop 47 (see page 3, line 53, of Tucker). Hook 50 of Tucker is capable of intercepting the cable loop were the pilot to fly too high so as to cause the loop to slide across at least a portion of the width of the

aircraft's wings; it is noted claim 232 does not positively recite that the fixture does, in fact, contact the wing of the flying object prior to interception. With regard to claim 236, see dog 54 of Tucker. As to claims 245, 246, 249, counterweight 61 of Tucker would act to remove slack from the cable.

Claim 250 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker. Use of stops or enlargements with the cable loop 47 of Tucker would have been obvious to one skilled in the art wishing to minimize erratic movement or vibration of the aircraft after it had been snagged through action of the hook and cable.

Claim 252 is rejected under 35 U.S.C. 103(a) as being unpatentable over King. Use of a sensor with the glider 88 of King, while not disclosed, nonetheless would have been obvious to one skilled in the art wishing to, for example, measure the temperature or sense humidity at altitude.

Claims 279-282, 286-288 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGeer et al. Use of a swept wing aircraft in the McGeer et al. capture method would have been obvious to one skilled in the art wishing to retrieve a variety of aircraft rather than be relegated one particular type or model.

In line 1 of the abstract, "An improved" should be changed to –A--, in line 2, "is disclosed" should be canceled; the deleted terminology is inherent in the disclosure.

Claims 147, 159, 221, 223, 226, 229, 248, 262 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed 2 June 2003 have been fully considered but they are not persuasive. Claims 129, 132, 150-153, 157, 177, 209-214, 216, 217, 220, 224, 225, 227, 228, 230-247, 249, 250, 252, 253, 257-261, 263-283, 285-288, 290, 291 are not believed allowable for the reasons set forth above.

RPS: 703/308-2700
5 September 2003

Robert P. Swiatek
ROBERT P. SWIATEK
PRIMARY EXAMINER
ART UNIT 333 3643